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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
10/673,520	09/30/2003	Makoto Hosoya	P24055	1649

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GREENBLUM & BERNSTEIN, P.L.C.  
1950 ROLAND CLARKE PLACE  
RESTON, VA 20191

EXAMINER

HRUSKOCI, PETER A

ART UNIT	PAPER NUMBER
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1724

DATE MAILED: 09/30/2004

Please find below and/or attached an Office communication concerning this application or proceeding.

S.C.

<b>Office Action Summary</b>	<b>Application No.</b> 10/673,520	<b>Applicant(s)</b> HOSOYA, MAKOTO	
	<b>Examiner</b> Peter A. Hruskoci	<b>Art Unit</b> 1724	

-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

**Status**

- 1) ☒ Responsive to communication(s) filed on 12 August 2004.
- 2a) ☒ This action is **FINAL**.      2b) ☐ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

**Disposition of Claims**

- 4) ☒ Claim(s) 1-16 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-16 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_\_ are subject to restriction and/or election requirement.

**Application Papers**

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

**Priority under 35 U.S.C. § 119**

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All    b) ☐ Some \*    c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).

\* See the attached detailed Office action for a list of the certified copies not received.

**Attachment(s)**

- |  |   |
|--|---|
| 1) <input type="checkbox"/> Notice of References Cited (PTO-892)   | 4) <input type="checkbox"/> Interview Summary (PTO-413)<br>Paper No(s)/Mail Date. _____ |
| 2) <input type="checkbox"/> Notice of Draftsperson's Patent Drawing Review (PTO-948)                                   | 5) <input type="checkbox"/> Notice of Informal Patent Application (PTO-152)             |
| 3) <input type="checkbox"/> Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)<br>Paper No(s)/Mail Date _____ | 6) <input type="checkbox"/> Other: _____  |

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1 and 2 are rejected under 35 U.S.C. 103(a) as being unpatentable over JP 3017741 Nishizawa et al. in view of Hellenbrand et al. 5,096,596. Nishizawa et al. disclose (see Abstract and Fig. 1) a method of utilizing rainwater falling on a building substantially as claimed. The claims differ from Nishizawa et al. by reciting that the rainwater is supplied to a purifier to carry out pH adjustment. Hellenbrand et al. disclose (see col. 2 line 43 through col. 3 line 45) that it is known in the art to utilize a pH adjusting agent in a filtering tank for purifying water. It would have been obvious to one skilled in the art to modify the method of Nishizawa et al. by carrying out the recite pH adjustment in view of the teachings of Hellenbrand et al., to aid in purifying the water.

Claims 3 and 4 are rejected under 35 U.S.C. 103(a) as being unpatentable over JP 3017741 Nishizawa et al. in view of Hellenbrand et al. 5,096,596 as above, and further in view of JP 04-007082 Masahiro et al.. The claims differ from the references as applied above by reciting that the sterilization is carried out using active oxygen produced by the decomposition of hydrogen peroxide. Masahiro et al. disclose (see Abstract) that it is known in the art to utilize hydrogen peroxide to produce active oxygen for sterilizing bacteria in contaminated water. It would have been obvious to one skilled in the art to modify the references as applied above by carrying out the recited sterilization in view of the teachings of JP 04-007082., to aid in sterilizing the water. With regard to claim 4, it would appear the ultraviolet rays, reducing agent,

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or activated carbon disclosed in Masahiro et al. would eliminate or decompose residual active oxygen as in the instant method.

Claims 5, 6, 9, 10, 13, and 14 are rejected under 35 U.S.C. 103(a) as being unpatentable over JP 3017741 Nishizawa et al. in view of Hellenbrand et al. 5,096,596 as above, and further in view of Elston 6,299,775. The claims differ from the references as applied above by reciting that the method includes specific steps of monitoring the upper and lower predetermined water levels in the storage tank. Elston disclose (see col. 3 line 24 through col. 4 line 18, and col. 10 line 31 through col. 12 line 24) that it is known in the art to utilize level sensors in a holding or storage tank to monitor a water recycling system including the collection of rainwater. It would have been obvious to one skilled in the art to modify the references as applied above by including the recited monitoring steps in view of the teachings of Elston, to aid in monitoring the water levels in the storage tank. With regard to claims 9 and 13, it is noted that Elston further teaches the addition of municipal water or tap water to the storage tank or cistern 40.

Claims 7, 8, 11, 12, 15, and 16 are rejected under 35 U.S.C. 103(a) as being unpatentable over JP 3017741 Nishizawa et al. in view of Hellenbrand et al. 5,096,596 and Elston as above, and further in view of JP 04-007082 Masahiro et al.. The claims differ from the references as applied above by reciting that the sterilization is carried out using active oxygen produced by the decomposition of hydrogen peroxide. Masahiro et al. disclose (see Abstract) that it is known in the art to utilize hydrogen peroxide to produce active oxygen for sterilizing bacteria in contaminated water. It would have been obvious to one skilled in the art to modify the references as applied above by carrying out the recited sterilization in view of the teachings of JP 04-007082., to aid in sterilizing the water. With regard to claims 8, 12, and 16, it would appear

the ultraviolet rays, reducing agent, or activated carbon disclosed in Masahiro et al. would eliminate or decompose residual active oxygen as in the instant method.

Applicant argues that the figures of JP 3017744 Nishizawa cannot properly be relied upon to disclose or suggest removing a predetermined quantity of initial precipitation from the rainwater collected from a roof surface of the building as recited in the instant claims. It is submitted that the gutter 4 as disclosed in Nishizawa appears to be collect rainwater from a roof surface of a building as in the instant invention. Furthermore, applicant has not presented sufficient factual evidence to support the above allegation.

Applicant argues that the Examiner has failed to point out any specific disclosure in Hellenbrand with regard to using the  $\text{MnO}_2$  as a catalyst to produce oxygen from hydrogen peroxide. It is submitted that the use of a catalyst to produce oxygen from hydrogen peroxide is not recited in the instant claims.

Applicant argues that it is not apparent that it would have been obvious to one of ordinary skill in the art to combine the gravity system of JP 3017741 Nishizawa with the pressurized system of Hellenbrand. It is submitted that the instant claims fail to recite a gravity system and fail to exclude a pressurized system. Furthermore, applicants have not supplied sufficient factual evidence to support the above argument.

Applicant argues that JP 04-007082 Masahiro et al. is used only with regard to contaminated water so as to prevent the clogging of pipes, and there is no apparent disclosure with regard to collecting rainwater. It is submitted that Nishizawa et al. as applied above was used to teach the use of a purification tank including a sterilizing plate for purifying rainwater. It would have been obvious to one skilled in the art to modify the method of Nishizawa et al. by

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utilizing active oxygen species produced by decomposition of hydrogen peroxide in view of the teachings of Maszhiro et al., to aid in sterilizing the rainwater.

Applicants arguments concerning Elston appear to be based on the propriety of the combination of Nishizawa et al. and Hellenbrand et al.. It is submitted that this combination is deemed properly applied for reasons stated above.

Applicants citation of case law has been carefully considered but is not deemed pertinent due to the different circumstances involved in the instant application.

Claims 1, 5, 9, and 13 properly written to includes steps for using a purifier comprising a filtering tank containing a pH adjusting agent, and a sterilization tank containing a primary reactive catalyst for producing active oxygen specifies, would be allowable.

**THIS ACTION IS MADE FINAL.** Applicant is reminded of the extension of time policy as set forth in 37 CFR 1.136(a).


A shortened statutory period for reply to this final action is set to expire **THREE MONTHS** from the mailing date of this action. In the event a first reply is filed within **TWO MONTHS** of the mailing date of this final action and the advisory action is not mailed until after the end of the **THREE-MONTH** shortened statutory period, then the shortened statutory period will expire on the date the advisory action is mailed; and any extension fee pursuant to 37 CFR 1.136(a) will be calculated from the mailing date of the advisory action. In no event, however, will the statutory period for reply expire later than **SIX MONTHS** from the mailing date of this final action.

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Any inquiry concerning this communication or earlier communications from the examiner should be directed to Peter A. Hruskoci whose telephone number is (571) 272-1160. The examiner can normally be reached on Monday through Friday from 6:30AM-4:00PM.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Duane Smith can be reached on (571) 272-1166. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

  
Peter A. Hruskoci  
Primary Examiner  
Art Unit 1724

9/28/04